



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/262,839	03/05/1999	KAORI NAKAYAMA	520.36997X00	1062
7590	07/28/2004		EXAMINER	
ANTONELLI TERRY STOUT AND KRAUS SUITE 1800 1300 NORTH SEVENTEENTH STREET ARLINGTON, VA 22209			HYUN, SOON D	
			ART UNIT	PAPER NUMBER
			2663	10

DATE MAILED: 07/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/262,839	NAKAYAMA ET AL.
	Examiner Soon D Hyun	Art Unit 2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 03 May 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 4-12 is/are allowed.
- 6) Claim(s) 1-3 and 13-16 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date: _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date: _____	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 15 recites the limitation "the degree of congestion" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-3, 13, 14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Irie et al (U.S. Patent No. 5,550,823) in view of Fichou et al (U.S. Patent No. 5,790,522)

Regarding claims 1 and 13, Irie et al (Irie) discloses an ATM switch connected to a plurality of input lines and output lines for forwarding cells received from each of the input lines to one of the output lines (FIG. 1) comprising:

a switch unit (11), having a plurality of input ports (14) and output ports (15) which outputs fixed length cells received from each of the input ports to one of the output ports specified by routing information contained in the cell header of the cells (col. 3, lines 40-44);

a plurality of input line interfaces (input circuits 1-N), each connected to one of the input ports, wherein each of the input line interfaces has a cell output controller (input buffer unit 2) which stores the cells received from the one of the input lines in queues (22) for each output line according to degree of priority (delay quality class, see col. 3, line 56-col. 4, line 11); and

a plurality of output line interfaces (output buffer unit 12), each connected to one of the output ports which stores output cells received from the one output port and send out the cells to one of the output lines.

However, Irie differs from the present application in that each input interface has no function to receive variable length packets from each input line to convert the

variable length packets to fixed length cells and accordingly, each output interface has no function to convert the fixed length cells to variable length packets to send out variable length packets to each output line.

Fichou et al (Fichou) et al discloses that an ATM switch having a receiver adaptor (20) for each input line to receive variable length packets and convert the variable length packets to cells and a transmit adaptor for each output line (22) to convert the cells to variable length packets to send out the variable length packets to the output line.

Those of skilled in the art would have been motivated by Fichou to incorporate a receive adaptor and a transmit adaptor into Irie to receive variable length packets and to convert the variable length packets to fixed length cells for switching, wherein it is well known that there are advantages for switching cells than switching variable length packets as taught by Fichou, see col. 3, lines 9-46.

Therefore, it would have been obvious to one having ordinary skill in the art to incorporate a receive adaptor and a transmit adaptor into Irie to receive variable length packets and to convert the variable length packets to fixed length cells for switching.

Regarding claims 2, 3, 14 and 16, Irie further discloses a monitor device (a detector 13) which detects congestion status (congestion status of output buffer unit 12) of cells for each output lines by monitoring the quantity of stored cells to notify the congestion status to each input line interface, whereby the cell output controller selectively prohibits the forwarding of cells according to the degree of priority, see col. 7, lines 18-53.

Allowable Subject Matter

6. Claims 4-12 are allowed.
7. Claim 15 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

8. Applicant's arguments filed 05/03/2004 have been fully considered but they are not persuasive.

Applicant argues that "the Examiner's allegation fails since there is no motivation for Fichou to adopt the structure of Irie. Thus, Fichou cannot be combined with Irie in the manner alleged by the Examiner." Examiner disagrees.

In response to applicant's argument that there is no motivation for Fichou to adopt the structure of Irie, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In response to applicant's argument that there is no motivation to combine the references, the examiner recognizes that obviousness can only be established by

combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Examiner provides the motivation to combine Fichou into Irie as discussed in the claim rejection.

Applicant further argues that "Neither of Irie or Fichou teach to divide an input packet into smaller sized data blocks before storing it into an input queue so that a newly arrived high priority packet can over take a previously arrived low priority packet at the input line interface even if a part of the previously arrived low priority packet has been switched. Examiner disagrees.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., newly arrived high priority packet can over take a previously arrived low priority packet at the input line interface even if a part of the previously arrived low priority packet has been switched) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

For the reasons as discussed above, Examiner believes that the claim rejection is proper.

Allowable Subject Matter

9. Claims 9-12 are allowed.
10. Claims 4-6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Soon-Dong Hyun whose telephone number is (703) 305-4550. The examiner can normally be reached on Monday-Friday from 8:30 A.M. to 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen, can be reached on (703) 308-5340.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

13. Any response to this final action should be mailed to:

Box AF

Commissioner for Patents

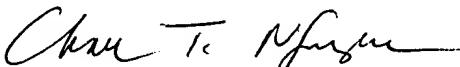
P.O. Box 1450

Alexandria, VA 22313-1450

Or faxed to: 703-872-9306 for formal communications intended for entry


S. Hyun

07/20/2004



CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600